



Implementing Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP)

March 1, 2010



What is Environmental Site Design (ESD)?

ESD is a comprehensive design strategy for maintaining predevelopment runoff characteristics and protecting natural resources. ESD relies on integrating site design, natural hydrology, and smaller scale stormwater management controls to capture and treat runoff. In addition to reducing runoff, improving water quality, and reducing issues with flooding, ESD:

- Filters air
- Shades, reducing urban heat island effects
- Provides cooling vegetation
- Provides habitat
- Provides human amenities for recreational landscape experiences
- Provides for the therapeutic benefits of natural areas
- Provides noise and aesthetic buffers
- Provides spaces for research and learning
- Reduces emissions and fuel costs through limited maintenance

Why is ESD to the MEP the focus?

The ESD approach to development, redevelopment, and retrofitting is preferred because it conserves natural features and runoff patterns on a site and reduces pollutants entering the storm drains, stormwater management facilities, and local streams and other waterways.

There are regional and state regulatory requirements to use ESD approaches for stormwater management to protect our local and regional waters and aquatic resources. Montgomery County's new MS4 permit requires that the County identify means of promoting the implementation of ESD. Section E.1.b. of the permit states the following:

Implement the stormwater management design policies, principles, methods, and practices found in the 2000 Maryland Stormwater Design Manual and the provisions

of Maryland's Stormwater Management Act of 2007 (Act). This includes, but is not limited to:

- Within one year of State adoption of regulations required under the Act, modify the County stormwater management ordinance, regulations, and new development plans review and approval processes in order to implement environmental site design (ESD) to the MEP;*
- Within one year of State adoption of regulations required under the Act, review existing planning and zoning and public works ordinance and other local codes to identify impediments to, and opportunities for, promoting the implementation of environmental site design (ESD) to the MEP.*
- Within two years of State adoption of regulations required under the Act, modify those ordinances and codes identified in Part III.E.b.ii. above to eliminate impediments to, and promote implementation of, ESD to the MEP; and*
- Report annually the modifications that have or need to be made to all ordinances, regulations, and new development plans review and approval processes to accommodate the requirements of the Act.*

The State adopted regulations required under the Act on May 4, 2009.

Next Steps

- A draft report will be produced on existing laws and regulations, obstacles to implementing ESD, and recommendations to promote the use of ESD techniques to the MEP along with recommended changes needed to implement the revised State Stormwater Design Manual.
- The draft report will be submitted to the CWTF members for review and to MDE by May 4, 2010.
- Draft findings and recommendations will be presented to the public in June 2010.



Montgomery County Clean Water Task Force

March 1, 2010 1:00 - 5:00pm
Rockville Library, 2nd floor meeting room



Purpose

- Identify potential Code modifications that may be easily implemented
- Identify impediments and corresponding Code modifications that merit further discussion
- Identify potential Code modifications that will be very difficult to achieve

Meeting Agenda

1:00-1:15 Introduction, Agenda Review, & Overview of Categories

Objective: provide a clear road map for the meeting

Juliana E. Birkhoff, RESOLVE

Bob Hoyt, Director, Montgomery County Department of Environmental Protection (DEP)

1:15-1:50 Common Issues and Concerns

Brief Presentation and Facilitated Discussion

Objective: address topics of common concern and examples of ESD in these contexts

Nicole Stern and Jennifer Zielinski, Biohabitats

Juliana Birkhoff, RESOLVE

CWTF members

1:50-2:15 Maintenance

Brief Talk and Facilitated Discussion

Objective: discuss inventory, inspection, and maintenance concerns

Amy Stevens, Montgomery County DEP

Juliana Birkhoff, RESOLVE

CWTF members

2:15-3:15 Density, Redevelopment, Infill, and Sustainability Audit

Brief Presentation and Facilitated Discussion

Objective: review applications of ESD in dense, urban areas; discuss challenges and solutions to implementing ESD while encouraging Smart Growth.

Nicole Stern and Jennifer Zielinski, Biohabitats

Meo Curtis, Montgomery County, DEP

Juliana Birkhoff, RESOLVE

CWTF members

3:15-3:25 Open Discussion

Comments from All Stakeholders and Facilitated Discussion

Objective: chance to raise issues that have not been dealt with so far and explore how to learn about them, delegate them, or make recommendations on them

3:25-3:35 Break

3:35-4:35 MEP, Development Approval Process, and Lead Agency Designation

Brief Presentation and Facilitated Discussion

Objective: discuss integration of MEP determination into the Development Approval Process

Jennifer Zielinski, Biohabitats

Meo Curtis, Montgomery County DEP

Juliana Birkhoff, RESOLVE

CWTF members

4:35-4:45 Open Discussion

Comments from All Stakeholders and Facilitated Discussion

Objective: chance to raise issues that have not been dealt with so far and explore how to learn about them, delegate them, or make recommendations on them

Juliana Birkhoff, RESOLVE

CWTF members

4:45-5:00 Summary and Next Steps

Objective: summarize recommendations and next steps for the Code review and the CWTF

5:00 Adjourn